

## REMARKS

### Claim Changes

Claims 1 and 10 are amended to more clearly recite the claimed invention. Specifically, Applicant has amended claims 1 and 10 to recite “*digitally* [combining each of the plurality of] low band signals.” Support for the changes can be found in paragraphs [0021] and [0033] of the Applicant’s specification as published (US Patent Publication No. 2005/0166250 A1). Thus, no new matter is added.

Claims 8 and 15 are amended to be consistent with claims 1 and 10 respectively, as amended.

Claim 7 is amended to correct a typographical error.

No amendment made is related to the statutory requirements of patentability unless expressly stated herein. No amendment is made for the purpose of narrowing the scope of any claim, unless Applicant had argued herein that such amendment is made to distinguish over a particular reference or combination of references. Any remarks made herein with respect to a given claim or amendment is intended only in the context of that specific claim or amendment, and should not be applied to other claims, amendments, or aspects of Applicant’s invention.

### Rejection of Claims 1-16 under 35 U.S.C. § 103(a) as being unpatentable over US 6,449,071 (Farhan) in view of US 6,477,182 (Calderone)

Applicant has amended the claims to clarify the invention. Applicant therefore respectfully requests reconsideration of the rejection of claims 1-16 under 35 U.S.C. § 103(a) as being unpatentable over Farhan in view of Calderone as herein amended.

Applicant respectfully submits that the combination of Farhan and Calderone does not teach or suggest all the claim limitations as set forth in independent claims 1 and 10, as amended. For example, independent claims 1 and 10, as amended recite “*digitally* [combining each of the plurality of] low band signals to form [a combined] low band signal” which is not taught or suggested in the combination of Farhan and Calderone.

Farhan is directed to a node for receiving analog signals transmitted within a broadband communication system which includes a summer for summing the analog signals for generating a summed analog signal and an analog-to-digital (A/D) converter coupled to the summer for converting the summed analog signal into a digital electrical signal. (See Farhan, Abstract)

Calderone is directed to a method for modulating a plurality of information signals, for CATV applications, onto respective unique intermediate frequency (IF) carrier signals, summing the respective IF carrier signals to provide a stacked IF carrier signal and upconverting the stacked IF carrier signal to a radio frequency (RF). (See Calderone, Abstract)

Applicant respectfully agrees with the Office Action's contention that Farhan fails to disclose "*digitally* [combining each of the plurality of] low band signals to form [a combined] low band signal" as recited by independent claims 1 and 10, as amended. However, the Office Action relies on Calderone for such. The Office Action in item 3, page 3 specifically refers to col. 3 lines 1-15 in Calderone as describing or being analogous to Applicant's combining each of the plurality of low band signals to form a combined low band signal. Applicant has amended independent claims 1 and 10 to clarify that the step of combining the low band signals is to digitally combine the low band signals. However, Calderone in col. 3 lines 10 to 15 merely suggests that the low passed intermediate frequency (IF) modulated signals are combined to produce a summed or a stacked IF signal. Further, Calderone in col. 3 lines 15-21 describes that the stacked IF signal (S4) may be formed when the IF modulated signals are arranged in a stack or placed one after the other. So, Calderone at most discloses summing or stacking of IF signals, but fails to disclose that the IF signals are *digitally summed* to form a combined IF modulated signal. Therefore, the combination of Farhan and Calderone fails to teach or suggest "*digitally* [combining each of the plurality of] low band signals to form [a combined] low band signal" as recited in the independent claims 1 and 10, as amended.

Further, Farhan's digital signal processing is performed at the subscriber end before transmitting the information to a headend i.e. Farhan's information flows in the *upstream direction*. (See Farhan, col. 3 lines 40-55). However, Calderone's modulation of a plurality of information signals is performed at the headend before distributing the information to one or more information customers (subscribers) i.e. Calderone's information flows in the *downstream direction*. (See Calderone, col. 2 lines 24-34). Since, both Farhan's digital signal processing and Calderone's modulation of plurality of information signals are performed at different entities in a communication system, one skilled in the art would not be motivated to apply Farhan's teaching of digital signal processing being performed at a subscriber end to Calderone's teaching of summing or stacking of low passed IF modulated signals at a headend to implement Applicant's claimed invention.

For the above reasons, Applicant submits that independent claims 1 and 10, as amended are not obvious in view of the combination of Farhan and Calderone, and therefore that the rejection of independent claims 1 and 10 under 35 USC 103(a) should be withdrawn.

Claims 2-9 and 11-16 depend from, and include all the limitations of independent claims 1 and 10 respectively, as amended. Therefore, Applicant respectfully requests the reconsideration of dependent claims 2-9 and 11-16 and requests withdrawal of the rejection.

Conclusion

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Such action is earnestly solicited by the Applicant. Should the Examiner have any questions, comments, or suggestions, the Examiner is invited to contact the Applicant's attorney or agent at the telephone number indicated below.

Please charge any fees that may be due to Deposit Account 502117, Motorola, Inc.

Respectfully submitted,

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